Table 1

Selected References Tacoma Smelter Source Tests and Emissions Estimates

Source Tests

Reference	Comments
Statnick 1974	determined trace element emissions from roaster/reverb and converter gas streams for As, Cd. Cr, Cu, Pb, Zn
GCA 1974	three high-vol air sampling stations adjacent to Tacoma Smelter; daily filters analyzed for 13 elements
PSAPCA 1974	source test, fugitive emissions from slag dumping
Nelson and Roberts 1975	emissions from electrostatic precipitator and pilot baghouse determined; size fractionation and emissions for As, Sb, Cd, Cu, Pb, Hg, Ni
Labbe 1975	source test, roof top of converter building; air loadings for As, Cd, Pb, Hg, Zn
Roberts 1975	analysis of deposition to three fall-out jars (4-month collection period) near Tacoma Smelter; As, Sb, Cd, Cu, Pb, Hg, Ni, Se
Labbe 1977	test of Hg emissions from experimental baghouse on roaster gas stream
USEPA 1979a	arsenic emissions from roaster baghouse, arsenic kitchen baghouse, and reverberatory furnace electrostatic precipitator
USEPA 1979b	arsenic emissions from flue and fugitive gases from converter operation
Henderson 1981	mass balance estimates of As, Pb, Zn emissions from slag dumping
PSAPCA 1982	source test for As emissions from slag skimming at reverb furnace
USEPA 1983a	various source tests for proposed NESHAP rule for high-

	arsenic primary copper smelter at Tacoma (see Appendix C)
USEPA 1984	As emission tests for reverb furnace and arsenic plant gas streams
PEDCo 1984	converter cycle emissions tests; As, Sb, Bi, Cd, Pb, Se
NEA 1984	source apportionment (receptor modeling) study; chemical composition and particle size fraction characterization of multiple smelter sources, multiple elements
Austin 1984	fallout samples after tall stack fire analyzed for As, Sb, Cu, Pb, Zn
ASARCO 1993	deposition of As, Cd, Pb in fallout jars from tall stack demolition

Emissions Estimates

Reference	Comments
Labbe 1973	estimated 1973 air emissions for As, Cd, Cu, Pb, Ni, Se, Ag, and Zn
Randt 1975	estimated 1975 emissions of SO2, total particulate, and arsenic trioxide from tall stack, converter building, and anode furnace
PSAPCA 1981	air emissions inventory (Appendix F to Draft EIS) providing annual SO2, total particulate, and arsenic trioxide emissions from 1971 through 1980
USEPA 1983a	arsenic material balance for smelter processes; estimates tall stack and fugitive arsenic emissions
Varner 1983	estimated annual As, Pb, and Hg emissions for 1960 through 1983
Roberts 2003	(from PSAPCA files) emissions estimates, various years, for As, Sb, Cd, Cu, Pb, Hg, Ni, Zn